

Vermont Mental Health Performance Indicator Project

DDMHS, Weeks Building, 103 South Main Street, Waterbury, VT 05671-1601 (802-241-2638)

MEMORANDUM

TO: Vermont Mental Health Performance Indicator Project
Advisory Group and Interested Parties

FROM: John Pandiani
Monica Simon

DATE: March 8, 2002

RE: Mortality and Cause of Death for Substance Abuse and CRT Clients

The attached page summarizes the results of a replication of our earlier examination of cause of death for Community Rehabilitation and Treatment (CRT) clients (distributed on January 11; <http://www.state.vt.us/dmh/Data/PIPs/2002/pip011102.pdf>). This analysis, however, now includes people who received substance abuse services from community mental health programs.

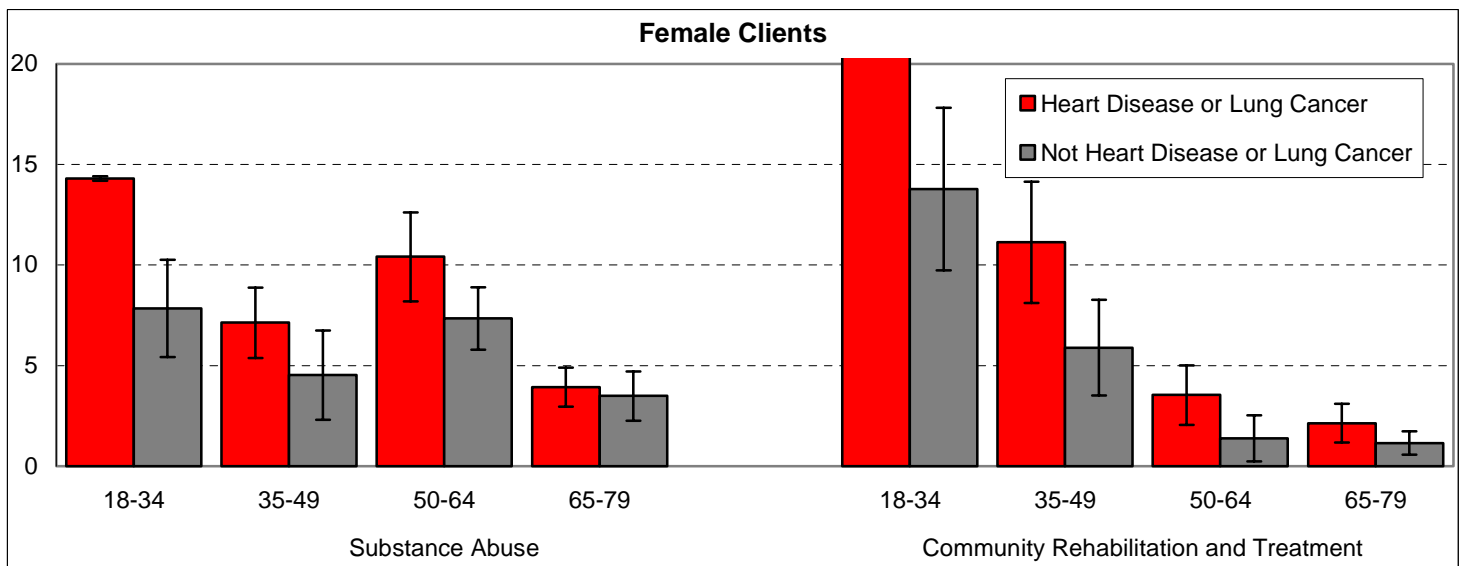
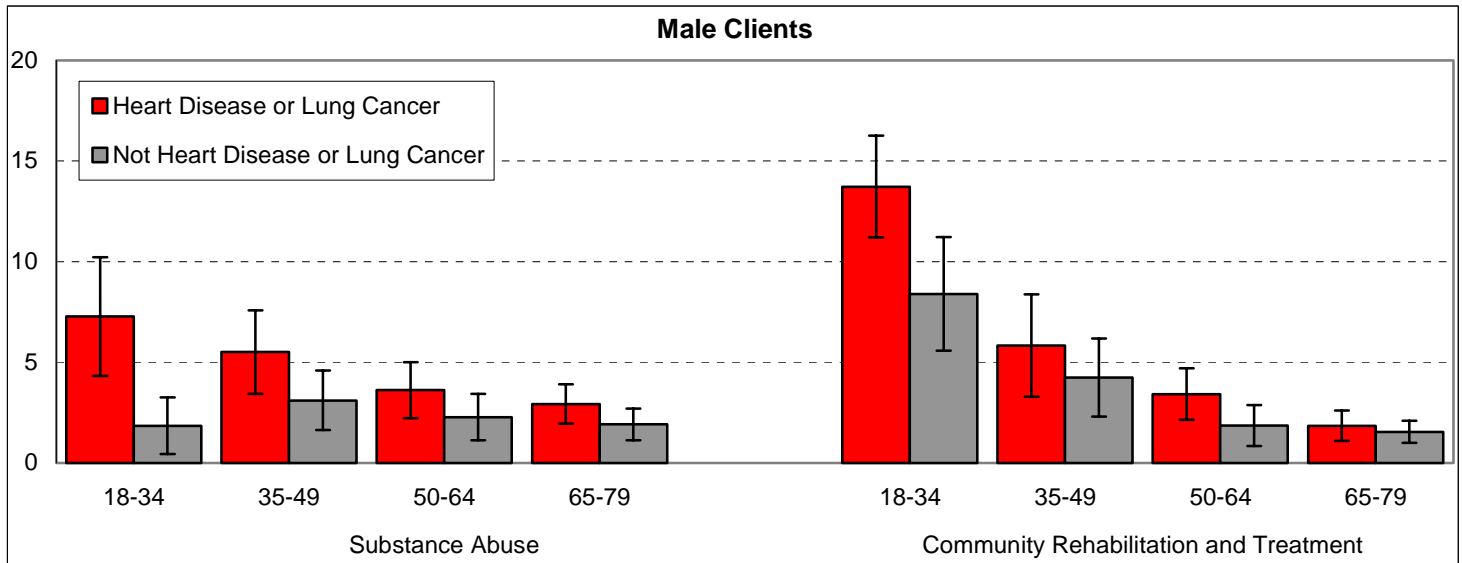
As in the earlier analysis, the data were drawn from Vermont's Vital Records Mortality Database and its monthly Community Mental Health Service Report database. The analysis involved determining the number of individuals who appear in both data sets using Probabilistic Population Estimation. Two-year mortality rates were calculated for all clients served in each of six base years for each of eight age/gender categories. The elevated risk of mortality, determined by dividing the mortality rate of service recipients by the mortality rate for the general population, for substance abuse service recipients and for CRT clients is repeated here.

As you will see, the risk of dying from heart disease or lung cancer is significantly greater than for the general population in almost every age/gender group in both client populations. The risk of dying from other causes, however, is significantly greater than for the general population in almost every substance abuse age/gender group, but is significantly greater than the general population only among CRT clients who are less than 50 years of age.

The degree of elevated risk of mortality from heart disease and lung cancer is significantly greater than the degree of elevated risk of mortality from other causes for substance abuse clients in our younger age groups but the differences tends to decrease with increasing age. This same pattern is evident for CRT clients. Interestingly, the elevated risk of death from heart disease or lung cancer for substance abuse clients tends to be less than the elevated risk for CRT clients, but among older clients, the elevated risk of death from heart disease or lung cancer for substance abuse clients is greater than the elevated risk for CRT clients.

We would like to thank all of you who commented and suggested directions for further research in response to our recent PIP regarding mortality among CRT clients. We are perusing the analyses you suggested and will be reporting our findings as they become available. We hope that the findings reported here will also be considered from a number of different perspectives and that you will share your interpretations and suggestions for further research. Please send you comments and suggestions to pip@ddmhs.state.vt.us or call 802-241-2638.

Elevated Risk of Mortality for Substance Abuse and Community Rehabilitation and Treatment Clients During the Year of Treatment or the Subsequent Year: 1992 - 1997



Male	Substance Abuse				Community Rehabilitation and Treatment			
	18 - 34	35 - 49	50 - 64	65 - 79	18 - 34	35 - 49	50 - 64	65 - 79
Heart Disease or Lung Cancer	7.3 ± 3.0	5.5 ± 2.1	3.6 ± 1.4	2.9 ± 1.0	13.7 ± 2.5	5.8 ± 2.5	3.4 ± 1.3	1.8 ± 0.8
Not Heart Disease or Lung Cancer	1.8 ± 1.4	3.1 ± 1.5	2.3 ± 1.2	1.9 ± 0.8	8.4 ± 2.8	4.2 ± 1.9	1.9 ± 1.0	1.5 ± 0.6

Female	Substance Abuse				Community Rehabilitation and Treatment			
	18 - 34	35 - 49	50 - 64	65 - 79	18 - 34	35 - 49	50 - 64	65 - 79
Heart Disease or Lung Cancer	14.3 ± 0.1	7.1 ± 1.7	10.4 ± 2.2	3.9 ± 1.0	45.6 ± 0.4	11.1 ± 3.0	3.5 ± 1.5	2.1 ± 1.0
Not Heart Disease or Lung Cancer	7.8 ± 2.4	4.5 ± 2.2	7.4 ± 1.5	3.5 ± 1.2	13.8 ± 4.0	5.9 ± 2.4	1.4 ± 1.1	1.2 ± 0.6

Elevated risk of mortality is an annual average. Based on analysis of Monthly Service Reports submitted to DDMHS by designated agencies and the Vital Records database maintained by the Vermont Health Department. Because these databases do not share unique client identifiers, Probabilistic Population Estimation was used to calculate the number of clients who died in the year of treatment or the subsequent year (with 95% confidence intervals).

Deaths attributed to cancer or heart disease use ICD-9 codes 162, 390-398, 402, 404, and 410-429. Deaths not attributed to cancer or heart disease use all other ICD-9 codes.